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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,973	07/09/2003	Kenneth S. Wales	END895-0511038	1299

7590 02/24/2005

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EXAMINER

DURAND, PAUL R

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,973

Applicant(s)

WALES ET AL.

Examiner

Paul Durand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 9-11, 14 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 12 and 15 is/are rejected.
- 7) ☒ Claim(s) 7, 13, 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/03, 04/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 9-11, 14 and 17-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/27/2004.

Claims 1-8, 12, 13, 15 and 16 will be examined on the merits

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The specification references three patents that are not disclosed on the IDS. These include US patents 5673840, 5865361 and 5797537.

Specification

3. The disclosure is objected to because of the following informalities: in paragraph 5 of the specification, there is a missing serial number for a referenced application.

Appropriate correction is required.

Double Patenting

4. Applicant is advised that should claims 13 and 16 be found allowable, claims 13 and 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Green et al (US 5,312,023).

In regard to claim 1, Green discloses the invention as claimed including a surgical instrument comprised of a shaft in the form of elongated portion 54, handle portion 52, with means for rotation and actuation, end effector 58 and an articulation mechanism 792 and 798 (see Figs. 52-54, 63, 64 and C20,L51 – C24,L48).

In regard to claim 2, Green discloses the invention as claimed including a stapling and severing mechanism comprised of cam bars 286, 290 and knife 240, operated from the handle portion (see Figs 20, 21 and C11,L6-67).

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In regard to claims 3 and 5, Green discloses the invention as claimed including a closure in the form of anvil 715, coupled to end effector 706, firing bar 732, supported by support 730, articulation drive tube 710 and pivoting means comprised of planetary gear set 781, for converting rotational motion to articulating motion (see Figs. 52-54, 63, 64 and C20,L51 – C24,L48).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Green in view of McGarry et al (US 5,289,963).

Green discloses the invention as claimed except for the use of projected posts to join the end effector with the tool. However, McGarry teaches that it is old and well known in the art of surgical tools to provide tabs (no number given, but next to reference number 89 in figure 15) mounted on end effector 16a and tabs (no number given, but next to reference number 76 in figure 15) mounted on a tool side 14 for the purpose of joining an end effector to a tool (see Fig. 15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided

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the invention of Green with the mounting means as taught by McGarry for the purpose of joining an end effector to a tool.

9. Claims 6,8,12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green in view of Bolanos et al (US 5,575,799).

In regard to claims 6 and 8, Green discloses the invention as claimed including a planetary gear set combination to articulate the end effector (see Figs. 52-54, 63, 64 and C20,L51 – C24,L48). What Green does not disclose is the use of a spur gear and bevel gear combination to articulate the end effector. However, Bolanos teaches that it is old and well known in the art of surgical tools to provide a shaft 103, with an articulation drive tube 40, and an articulation mechanism comprised of spur gear with teeth 41, engaging teeth 34 of the end effector 105 for the purpose of articulating a surgical tool (see Figs. 2,3 and C4,L24-57). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Green with the alternative means of articulation as taught by Bolanos for the purpose of articulating a surgical tool.

In regards to claim 12 , Green discloses the invention as claimed including handle portion 52, with means for rotation and actuation, a shaft in the form of elongated portion 54, acting as a frame and articulation drive tube, end effector 58 and pivoting means comprised of planetary gear set 781, for converting rotational motion to articulating motion (see Figs. 52-54, 63, 64 and C20,L51 – C24,L48). What Green does not disclose is the use of a spur gear and bevel gear combination to articulate the end effector. However, Bolanos teaches that it is old and well known in the art of surgical

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tools to provide a shaft 103, with an articulation drive tube 40, and an articulation mechanism comprised of spur gear with teeth 41, engaging teeth 34 of the end effector 105 for the purpose of articulating a surgical tool (see Figs. 2,3 and C4,L24-57).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Green with the alternative means of articulation as taught by Bolanos for the purpose of articulating a surgical tool.

In regard to claim 15, the modified invention of Green discloses the use of a spur gear with straight teeth 41. What the modified invention of Green does not specifically disclose is the use of a beveled spur gear. However, the examiner takes Official Notice that it would have been a matter of design choice to provide a beveled spur gear in lieu of a straight toothed spur gear for the purpose of articulating a tool. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Green with the alternative bevel gear arrangement for the purpose of articulating a tool.

Allowable Subject Matter

10. Claims 7,13 and 16 as currently written are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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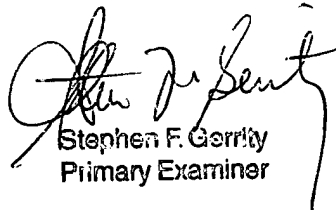
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grove and Smith have been cited to show devices having similar structure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 571-272-4459. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Durand
February 22, 2005


Stephen F. Gerrity
Primary Examiner